

# **The Importance of Social Indicators in Outreach Programs?**

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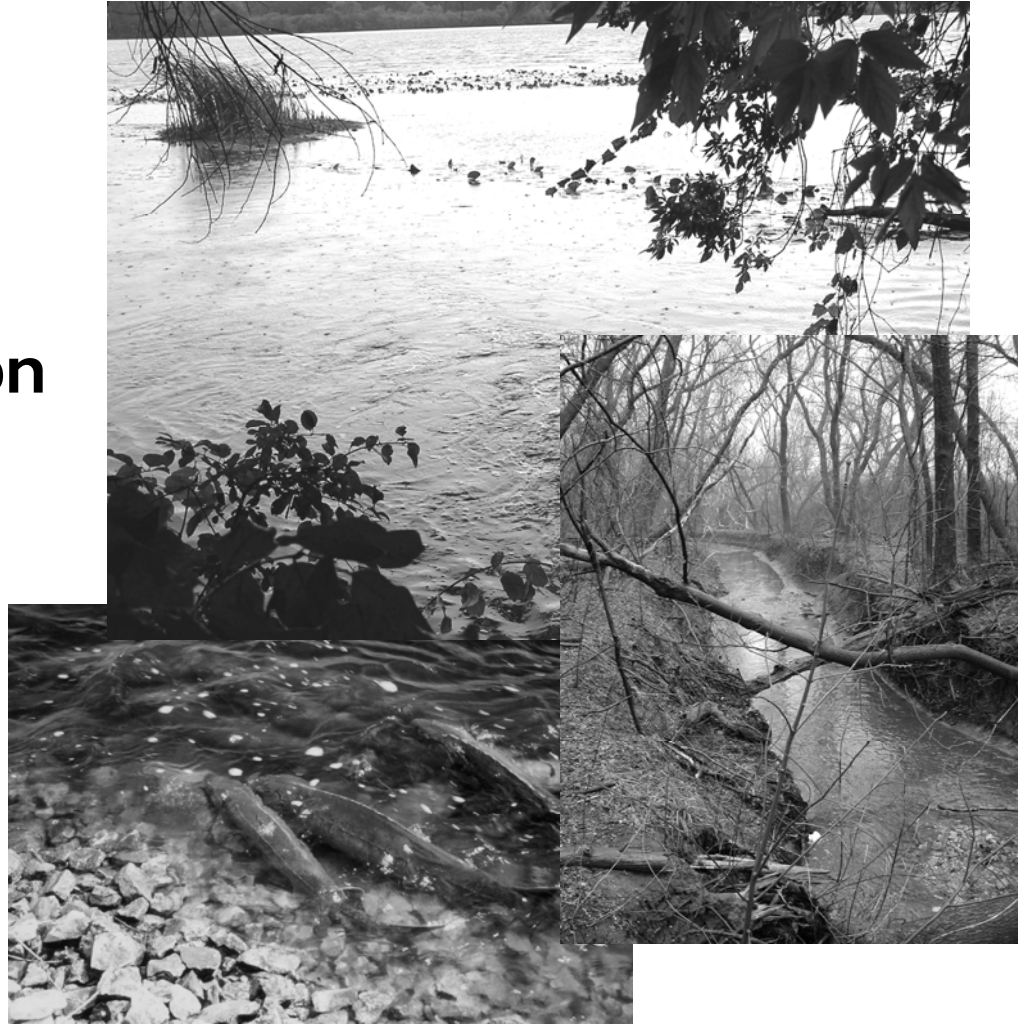
**Robin Shepard, University of Wisconsin**

Acknowledgements to:

Rebecca Power, CSREES Regional Water Quality Liaisons, Great Lakes Region; and  
Ken Genskow, Assistant Professor Department of Urban and Regional Planning, UW Madison  
Tom Davenport, US EPA Region 5

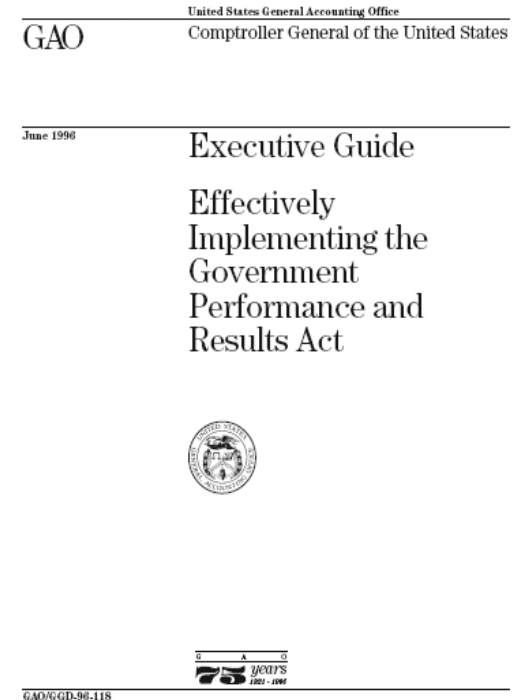
# Desired Environmental Outcomes

- Reduced sediment
- Reduced nutrients
- Reduced peak flow
- Increased infiltration
- Control of Evasive Species
- Restored habitat/  
stream morphology



# Attention to Social Indicators

- Federal rules designed to “make” us accountable
- Less funding, yet with an emphasis on competitive distribution
- Increased attention outcomes and benchmarks as performance standards

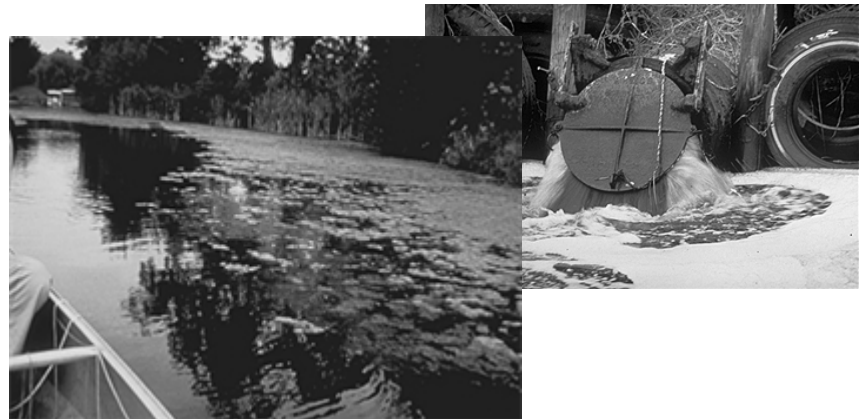


# Types of Impacts

## Administrative



## Social



## Environmental

# Administrative

- Dollars invested
- Staff hours
- Numbers of NPM plans
- Workshops held
- Number of sub-projects
- Number of farmers
- Publications generated
- Grant dollars secured



# Administrative

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## Strengths

- Easy in the short-term
- Inexpensive
- Not time intensive
- Focus on programmatic goals

## Weaknesses

- Often lack context of change in protection/restoration of the natural resource

# Environmental

- Biological
- Physical
- Land uses
- Chemical



# Environmental

## Strengths

- The ultimate answers – what changed in the environment
- Data can be used to adapt approaches
- Assesses progress toward environmentally-related goals

## Weaknesses

- The link of what we did “programmatically” and what happened environmentally.
- Requires special expertise
- Cost



# Social

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- Individual Change and Adoption
- Community
- Organizational
- Public participation
- Aggregation of Individual Change into an analysis of how the threat of degradation is influenced.

# Social

## Strengths

- Focuses on program or project impact with respect to the resource manager
- Augments the tracking of progress toward environmental goals
- Often precedes environmental change
- Maybe detected within the time frame or program

## Weaknesses

- The linkage to specific environmental changes
- Requires special expertise
- Cost

# Attention to Social Indicators

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- ✓ Identifies audience - beyond superficial targeting
- ✓ Aids in message/curriculum selection
- ✓ Unifies effective communication methods
- ✓ Focuses staff expertise, time and integrates
- ✓ Builds staff capacity
- ✓ Prioritizes funding decisions (disproportionality)
- ✓ Establishes a baseline for true impact measurement

# Challenge Yourself

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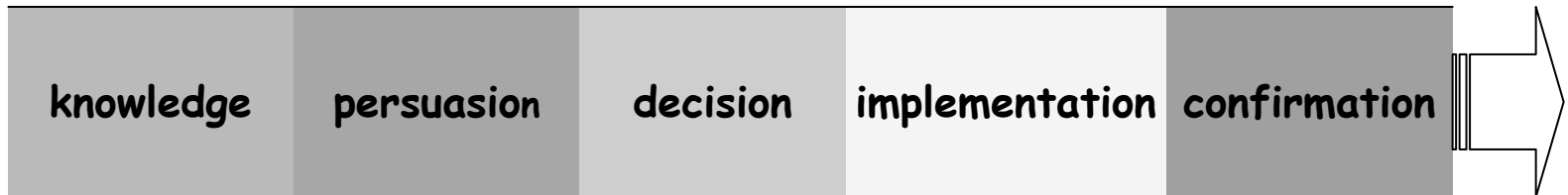
***While there is no way of actually measuring the success of an information campaign, we believe it was successful.***

***A 319 Project Report  
(posthumously without permission!)***

# Social Indicators

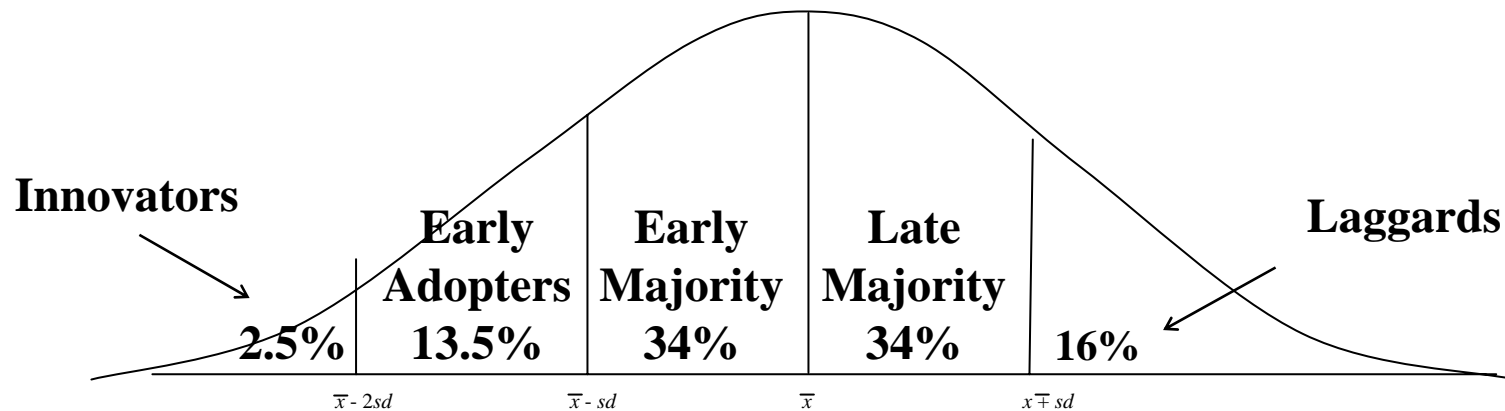
## What do They Tell us?

### The Resource Manager and The Innovation-Decision Process



*Rogers, Everett M. 1995. Diffusion of Innovations*

# Innovativeness and Adopter Categories

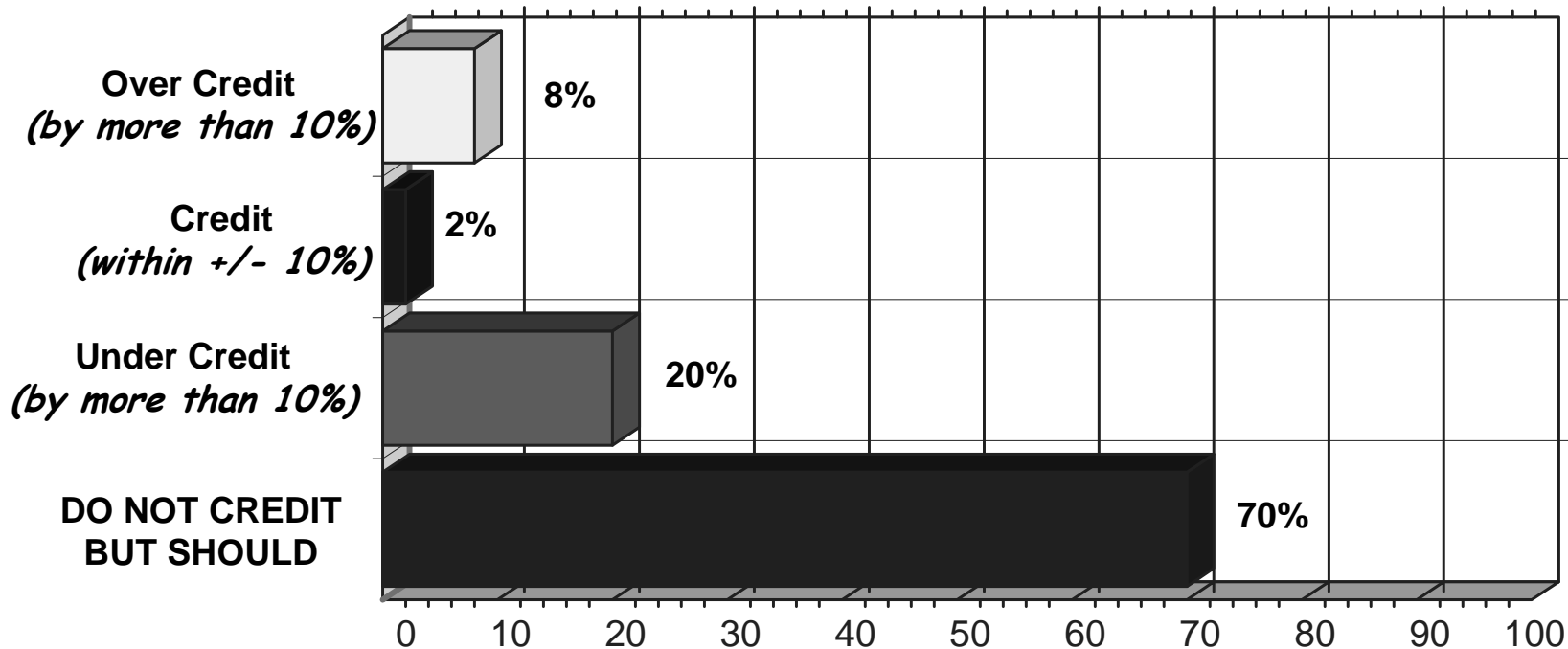


*Rogers, Everett M. 1995. Diffusion of Innovations*

# Social Indicators

## What do They Tell us?

### Farmers Crediting Manure Nitrogen



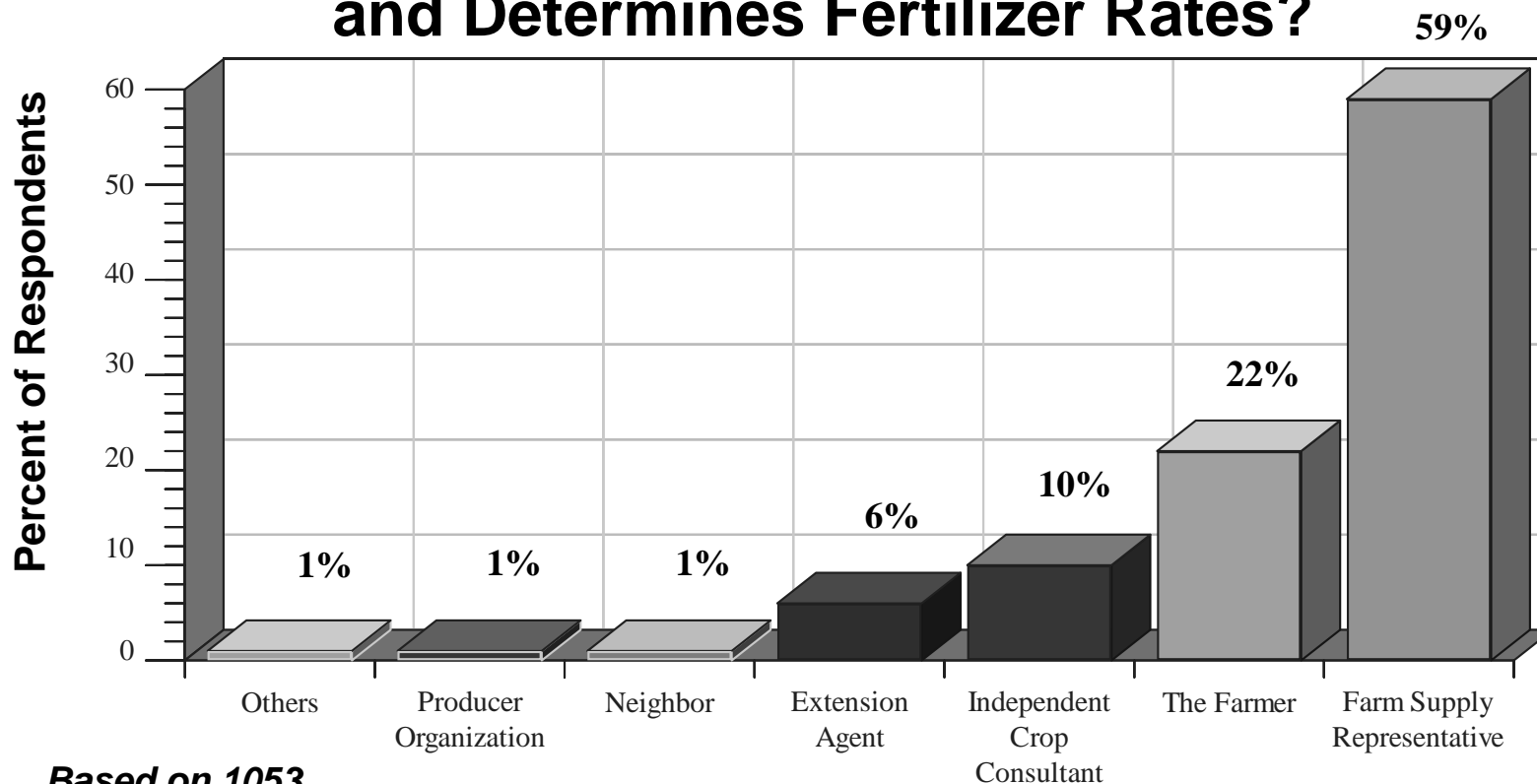
N=682

Percent of the farmers who apply manure

# Social Indicators

## What do They Tell us?

### Who Interprets Soils Test Results and Determines Fertilizer Rates?



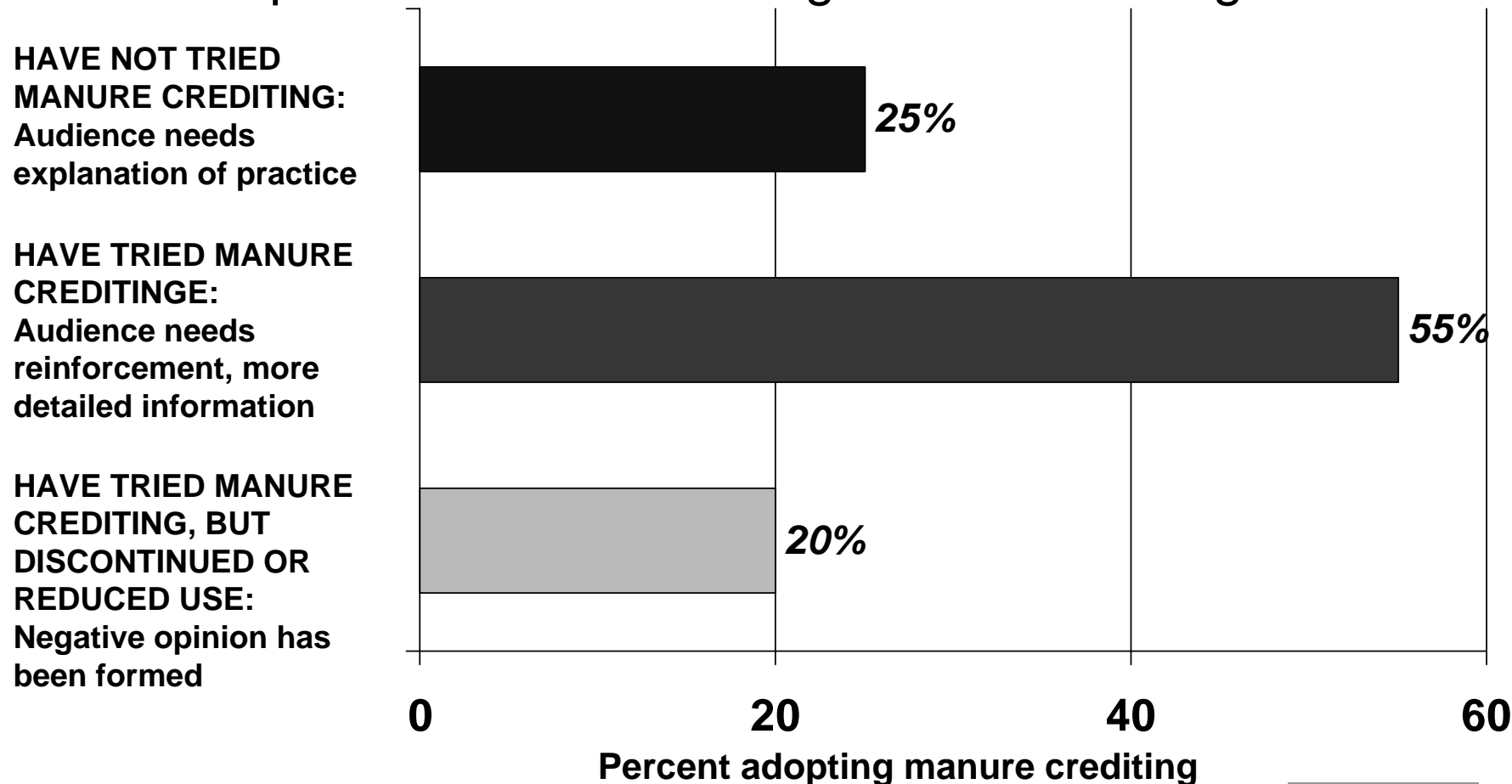
**Based on 1053  
farmers**



# Social Indicators

## What do They Tell us?

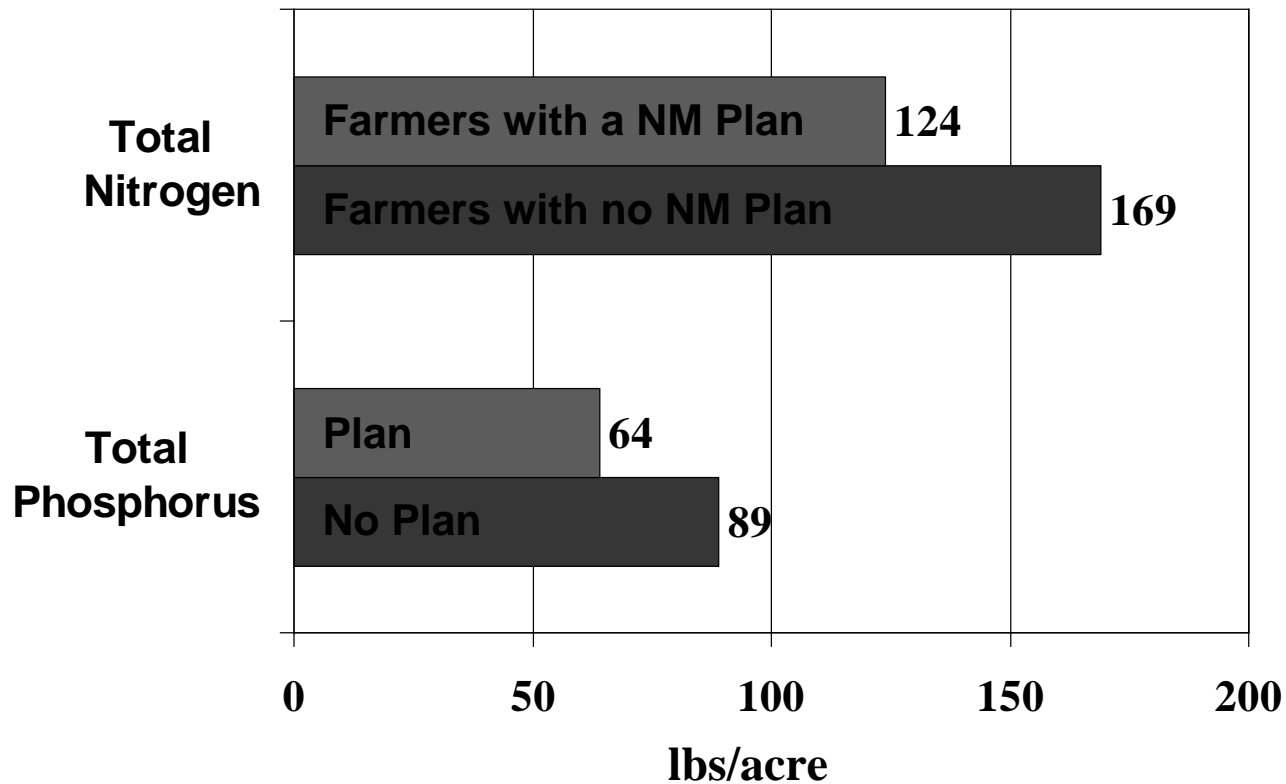
### The Adoption of Nutrient Management & Message Content



# Social Indicators

## What do They Tell us?

### Nutrient Application Rates



# Social Indicators

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## What do They Tell us?

### Nutrient Management Workshops (One Year Later)

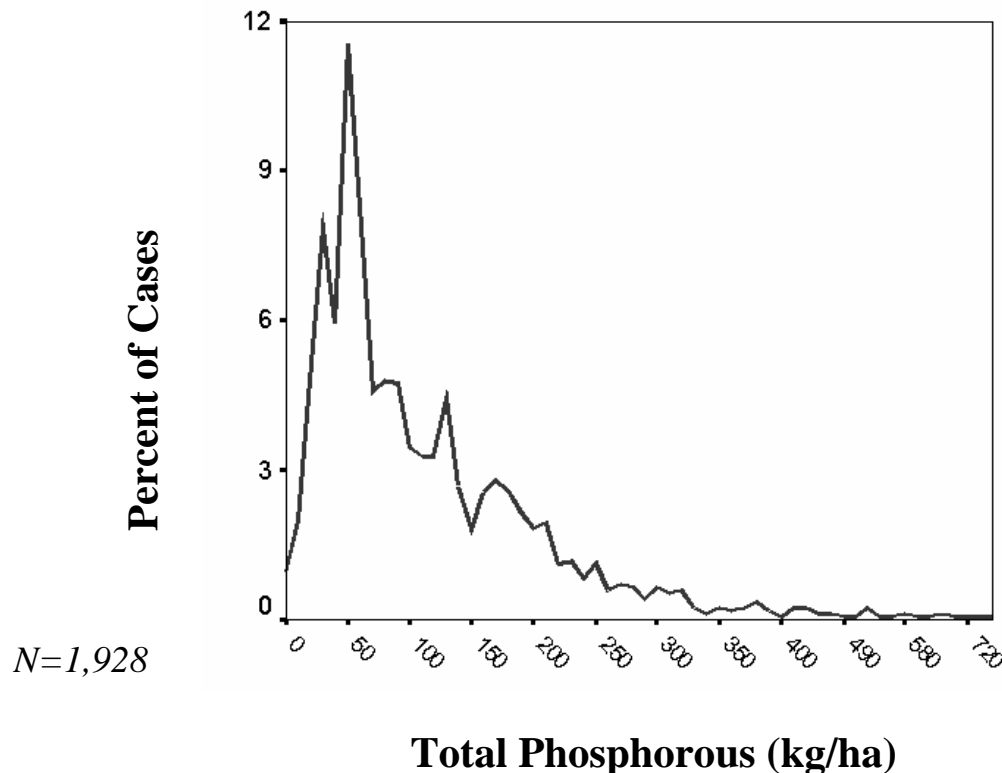
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- 79% decreased total nitrogen applications
- 75% decreased total phosphorous applications
- 86% of farmers reported following their NMPs on 76% or more of their acres
- 42% were following their NMPs on 100% of their acres

# Social Indicators

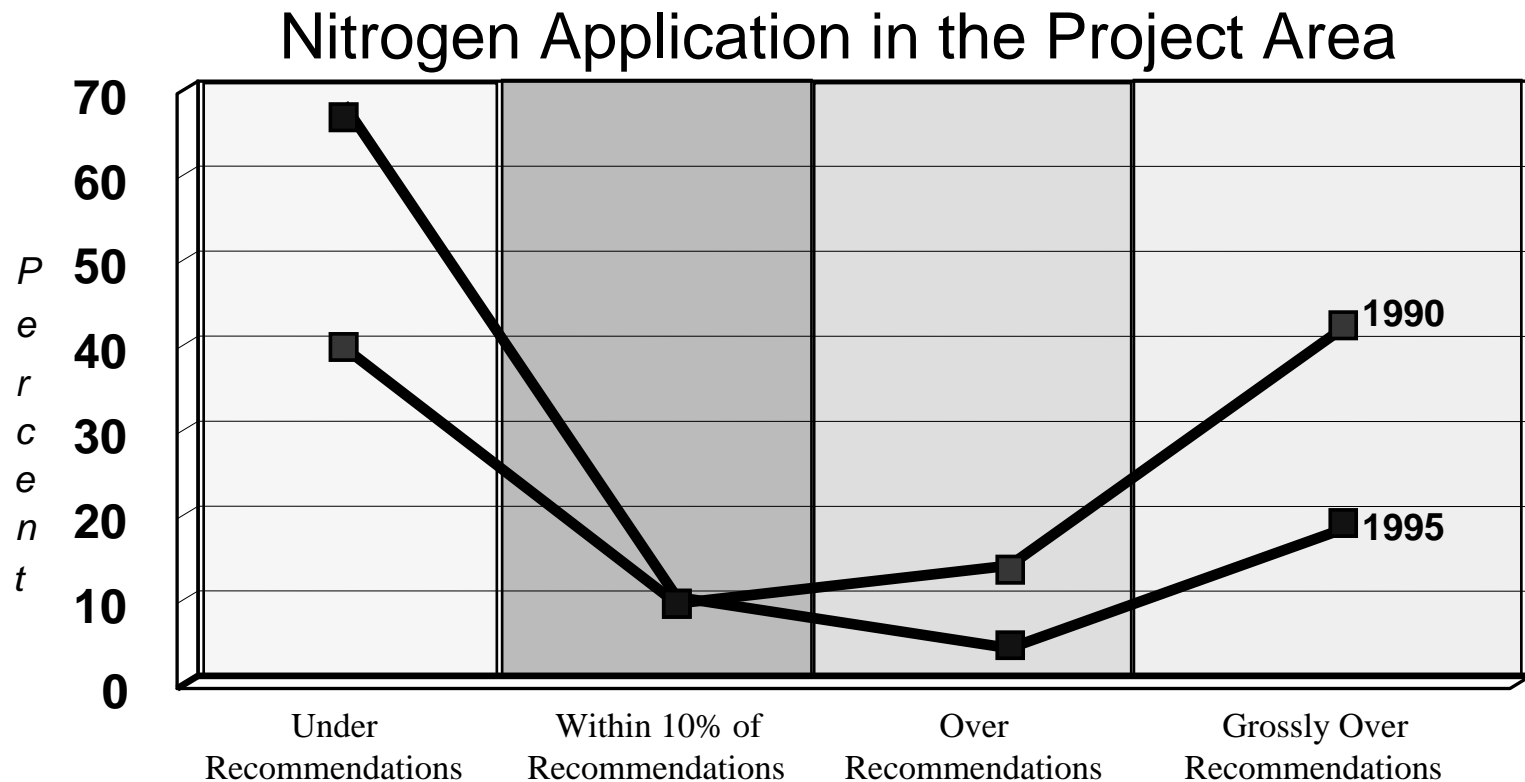
## What do They Tell us?

Total Phosphorous per Acre  
Used in Wisconsin Corn Production



# Social Indicators

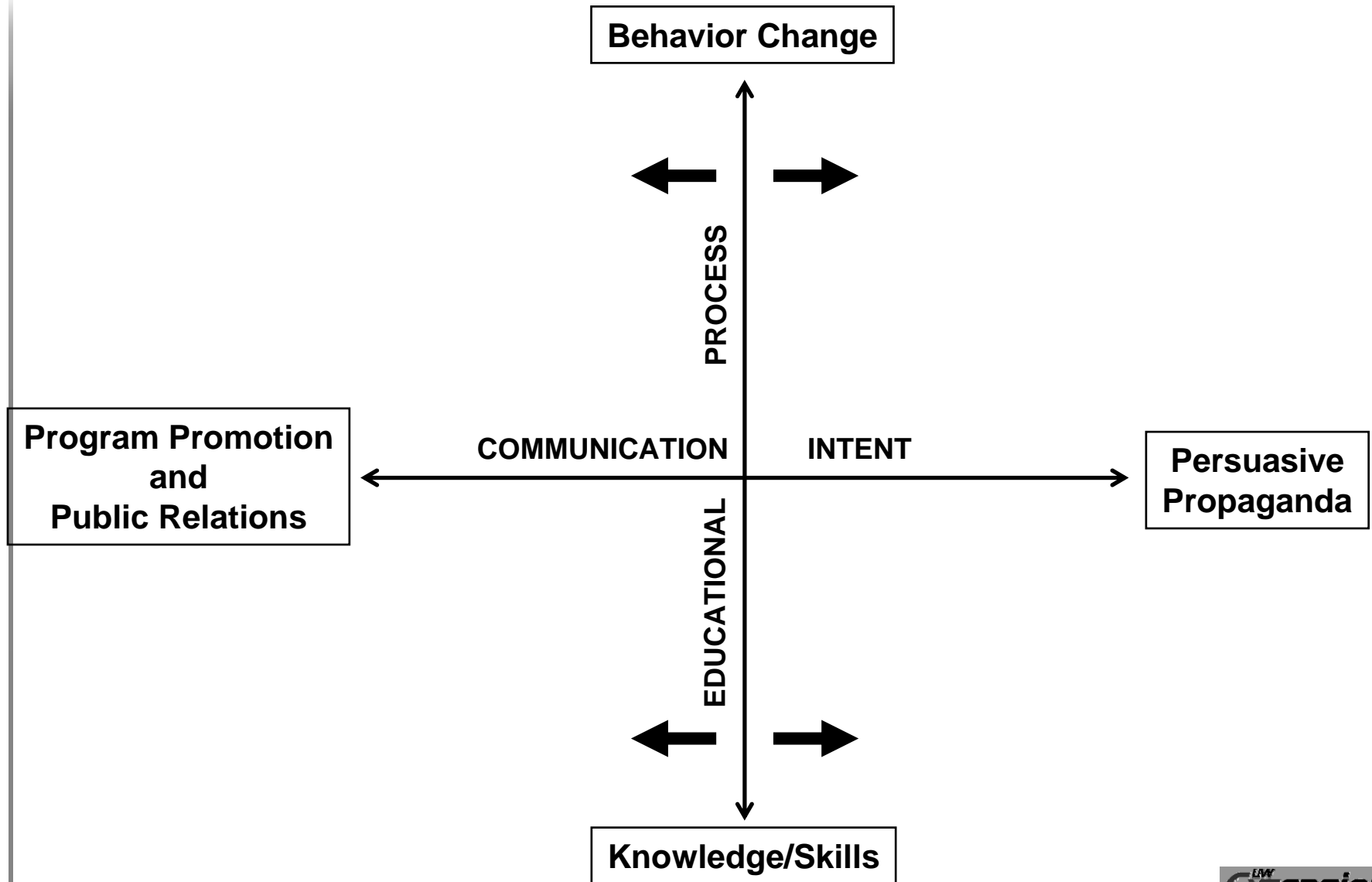
## What do They Tell us?



1990 Nitrogen Application Mean = 242 kg/ha\*  
(Based on 101 cases-population of respondents.)

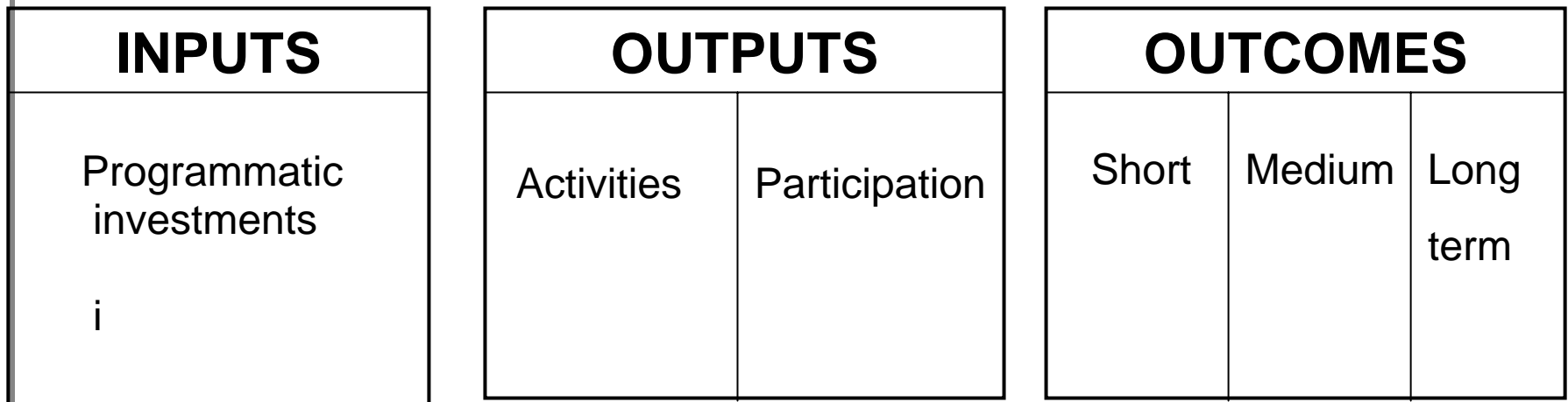
1995 Nitrogen Application Mean = 152 kg/ha\*  
(Based on 56 randomly selected cases.)

# Program Emphasis



# Logic Model

## PLANNING



## EVALUATION



# The Logic Model Built by USEPA Region 5 Staff

## PLANNING



INPUTS			OUTPUTS		OUTCOMES		
base funds amount of funds to sub-state recipients number of state employees			<b>Activities:</b> TMDL identification	<b>Participation:</b> bmp related activities	<b>Short:</b> bmp adoption rates	<b>Medium:</b> stream bank/shoreline restoration (miles)	<b>Long</b> NPS pollutant reductions load reductions

## EVALUATION





# Challenge Yourself

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Strive to be accurate and correct  
this will gratify some people and  
annoy the rest.

*- Mark Twain*

# Challenging Measurement Issues

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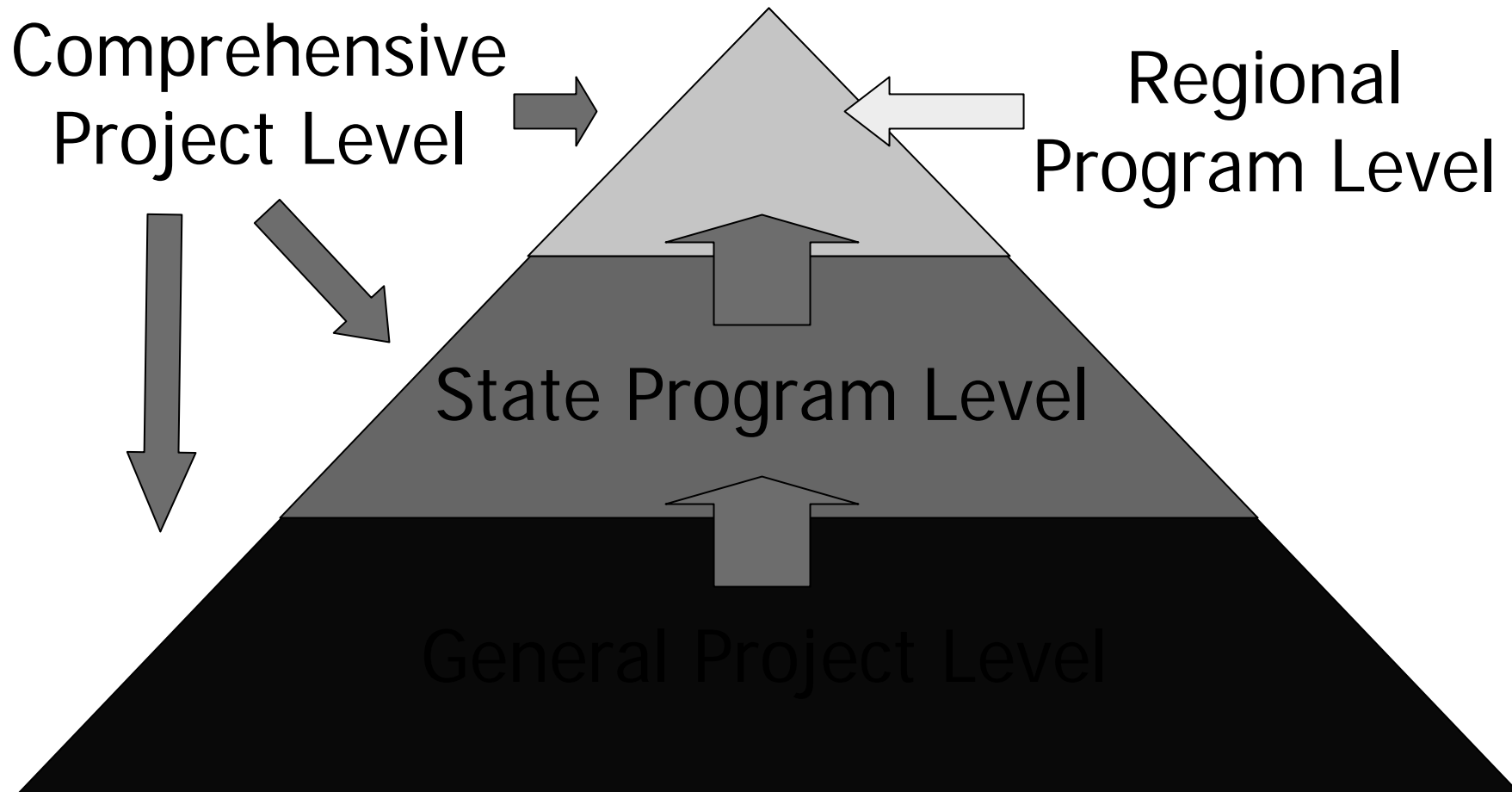
- **Policy impacts**
- **Practice adoption**
- **Stakeholder participation**
- **Volunteer contributions**
- **Remediation versus Prevention**

# Why Social Indicators?

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- Resource management involves a resource manager
- Progress toward environmental change
- Incorporates contextual information on the efficacy of NPS programs and projects
- More timely than environmental indicators
- Resource management involves a resource manager

# Social Indicators Framework



# When You Think Social Change Indicators – Ask Yourself, “So What?”

- Newsletters and carpet bomb public relations
- Citizen awareness of problems
- Attitudes and values in the target audience
- Who attends “events”
- Development of a watershed plan and/or what it includes
- Sign-ups, cost-share totals
- Agency perceptions, responsiveness, trust, your image
- Creation of TMDLs
- Did anyone do anything, and to what extent did they do it – behavior and resource manager change



*Land Grant Colleges' and Universities'*

# Great Lakes

## Regional Water Program

*A Partnership of USDA CSREES  
& the Land Grant System*

**<sup>LW</sup>  
Extension**